## REMARKS

Applicants respectfully request further examination and reconsideration in view of the instant response. Claims 1-3, 6-8 and 12-17 remain pending in the case. Claims 1-3, 6-8 and 12-17 are rejected

## 103(a) Rejection

According to the Office Action mailed October 20, 2008, hereinafter referred to as the "instant Office Action," Claims 1-3, 6-8 and 12-17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,153,946 by Koch et al., hereinafter referred to as "Koch," in view of U.S. Patent Application Publication No. 2004/0228087 by Coglitore, further in view of U.S. Patent No. 5,861,684 by Slade et al., hereinafter referred to as "Slade." Applicants have reviewed Koch, Coglitore and Slade and respectfully submit that the embodiments recited in Claims 1-3, 6-8 and 12-17 are patentable over Koch in view of Coglitore, further in view of Slade, for at least the following rationale.

Applicants respectfully direct the Examiner to independent Claim 1 that recites that an embodiment of the present invention is directed to (emphasis added):

A power distribution system comprising:

one or more loads, each load operable to be mounted in a rack location;

a plurality of power sources, each power source having a capacity less than each load and operable to be mounted in a rack location not having a load; and

an interconnect arrangement including a plurality of interconnects, the interconnects directly connecting each load to each of the sources in parallel such that each load is fully powered and if anyone source fails, each load remains fully powered.

200209625-1 App. No.: 10/777,505 Examiner: Amaya, Carlos David 2 Group Art Unit: 2836 Independent Claims 13 and 14 recite similar embodiments. Claims 2, 3, 6-8, 12 and 15-17 that depend from independent Claim 1 also include this embodiment.

"As reiterated by the Supreme Court in *KSR*, the framework for the objective analysis for determining obviousness under 35 U.S.C. 103 is stated in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). Obviousness is a question of law based on underlying factual inquiries" including "[a]scertaining the differences between the claimed invention and the prior art" (MPEP 2141(II)). "In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious" (emphasis in original; MPEP 2141.02(I)). Applicants note that "[t]he prior art reference (or references when combined) need not teach or suggest all the claim limitations, however, Office personnel must explain why the difference(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art" (emphasis added; MPEP 2141(III)).

Applicants respectfully submit that "[i]t is improper to combine references where the references <u>teach away from</u> their combination" (emphasis added; MPEP 2145(X)(D)(2); *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983)). Applicants respectfully note that "[a] prior art reference must be considered in its entirety, i.e., as a <u>whole</u>, including portions that would lead away from the claimed invention" (emphasis in original; MPEP 200209625-1

 2141.02(VI); W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984)). Applicants respectfully submit that there is no motivation to combine the teachings of Koch and Slade, because Koch teaches away from the suggested modification.

First, Applicants respectfully submit that Koch <u>teaches away from</u> "a plurality of power sources, <u>each power source having a capacity less than each load</u> and operable to be mounted in a rack location not having a load" (emphasis added) as recited in independent Claims 1 and 14, and the similar recitation of independent Claim 13, and that Koch <u>teaches away from</u> the suggested modification and combination with Slade.

Applicants respectfully note that the instant Office Action recites that "Koch, however, does not disclose expressly ... each power source having a capacity less than each load, and interconnects connecting each load to each of the sources in parallel" (emphasis added; instant Office Action, page 3, lines 1-5). Applicants understand the instant Office Action to assert that Slade overcomes this shortcoming. In particular, Applicants understand the instant Office Action to assert that Slade discloses that "each of the sources has a capacity less than the load," and that such a disclosure overcomes this shortcoming of Koch.

Applicants understand Koch to disclose "[i]n one embodiment, redundancy is provided by an extra power supply in a power supply segment.

In another embodiment, redundancy is provided by the excess capacity present

200209625-1 App. No.: 10/777,505 Examiner: Amaya, Carlos David 4 Group Art Unit: 2836 in the remaining power supplies in a ring when one power supply in the ring fails" (emphasis added; col. 3, lines 19-23).

Applicants note that Koch discloses that "[i]n a first embodiment, a redundant power supply is provided at the 'top' of a redundant power segment, with one or more computer devices coupled "beneath" the redundant power supply. If the power supply of any device fails, that device 'borrows' power from the device immediately upstream in the redundant power segment. If the power supply of the device immediately upstream in the redundant power segment no longer has sufficient capacity to power its own circuits, that device borrows power form the device immediately upstream from it" (emphasis added; col. 2, lines 1-11).

Accordingly, Applicants understand this embodiment of Koch to disclose that in the event of a failure of a power supply for a device, a redundant power supply, e.g., redundant power supply 12 of FIG. 1A, is operable to provide power to the device, either directly or through a propagation of power through connected devices. In particular, Applicants respectfully submit that Koch specifically discloses that each power supply, including the redundant power supply, is operable to provide at least as much power that is needed for a particular device.

Moreover, Koch discloses that "[i]n a second embodiment of the invention, a plurality of devices are coupled into a ring to provide redundant power for each other. When a power supply in the ring fails, the excess capacities of the remaining power supplies provide power for all the devices"

200209625-1 App. No.: 10/777,505 Examiner: Amaya, Carlos David 5 Group Art Unit: 2836 (emphasis added; col. 2, lines 23-27). Therefore, Applicants respectfully submit that Koch specifically discloses that each power supply is operable to provide at least as much power that is needed for a particular device.

Therefore, by disclosing that each power supply of Koch, including the redundant power supply, <u>must</u> have at least as much power required to power at least one device of Koch, Applicants respectfully submit that Koch <u>teaches</u> <u>away from</u> "a plurality of power sources, <u>each power source having a capacity less than each load</u> and operable to be mounted in a rack location not having a load" (emphasis added) as recited in independent Claims 1 and 14, and the similar recitation of independent Claim 13. Moreover, Applicants respectfully submit that these disclosures of Koch <u>teach away from</u> the suggested modification and combination with Slade.

Second, Applicants respectfully submit that the proposed combination of Koch and Slade <u>would change the principle of operation</u> of Koch, and would render Koch <u>unsatisfactory for its intended purpose</u>.

Applicants note that "[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious" (emphasis added) (MPEP 2143.01; *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)). Moreover, "[i]f the proposed modification would render the prior art invention being modified <u>unsatisfactory for its intended purpose</u>, then there is no suggestion or motivation to make the

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proposed amendment" (emphasis added) (MPEP 2143.01; In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)).

As presented above, Applicants understand Koch to disclose a method and system for providing redundant power to connected devices. In particular, as disclosed in Koch, each power supply must be configured to provide at least enough power to at least one connected device. In particular, Applicants respectfully submit that modifying Koch in such a manner would change the principle of operation of Koch. Moreover, Applicants respectfully submit that modifying Koch to include a power supply that provides less power than is necessary to power a device would cause the method and systems of Koch to fail. Accordingly, Applicants respectfully submit that modifying Koch would render Koch <u>unsatisfactory</u> for its intended purpose.

In summary, Applicants respectfully submit that the rejection of Claims 1-3, 6-8 and 12-17 is improper. In particular, Applicants respectfully submit that the rejection of Claim 1-3, 6-8 and 12-17 does not satisfy the requirements of a *prima* facie case of obviousness as Koch, Coglitore and Slade as a whole do not render the claimed embodiments obvious. In particular, Applicants respectfully submit that Koch teaches away from "a plurality of power sources, each power source having a capacity less than each load and operable to be mounted in a rack location not having a load" (emphasis added) as recited in independent Claims 1 and 14, and the similar recitation of independent Claim 13. Moreover, Applicants respectfully submit that Koch teaches away from the suggested modification and combination with Slade. Furthermore, Applicants respectfully submit that the

200209625-1 App. No.: 10/777,505 Examiner: Amaya, Carlos David 7 Group Art Unit: 2836 proposed combination of Koch and Slade <u>would change the principle of operation</u> of Koch, and would render Koch <u>unsatisfactory for its intended purpose</u>.

Applicants respectfully assert that Koch, Coglitore and Slade does not render obvious the claimed embodiments of the present invention as recited in independent Claims 1, 13 and 14, that these claims overcome the rejection under 35 U.S.C. § 103(a), and that these claims are thus in a condition for allowance. Therefore, Applicants respectfully submit that Koch, Coglitore and Slade also does not render obvious the claimed embodiments as recited in Claims 2, 3, 6-8, 12 and 15-17 that depend from independent Claim 1 also overcome the rejection under 35 U.S.C. § 103(a), and are in a condition for allowance as being dependent on an allowable base claim.

## CONCLUSION

In light of the above remarks, Applicants respectfully request reconsideration of the rejected claims. Based on the arguments presented above, Applicants respectfully assert that Claims 1-3, 6-8 and 12-17 overcome the rejections of record, and therefore Applicants respectfully solicit allowance of these claims.

The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Respectfully submitted,

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